## **Original article**

# Role commitment and coping strategies in female patients with depressive disorders at King Chulalongkorn Memorial Hospital

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**Background:** Role commitment, coping strategies, and social support were factors associated with depression in female depressed patients. However, studies concerning these factors in Thai female depressed patients were still limited.

**Objective:** To determine the severity and associated factors of depression in female patients with depressive disorders. The associated factors included role commitment, coping strategies, and social support.

*Methods:* One hundred and fifty two patients aged 18 years and above diagnosed as major depressive disorder or persistent depressive disorder or double depression using DSM-5 criteria were recruited. All subjects completed five questionnaires, namely: 1) Demographic Questionnaire; 2) Beck Depression Inventory-II (BDI-II) – Thai Version; 3) Multiple Role Commitment Questionnaire; 4) Coping Scale; and, 5) Social Support Questionnaire. Medical data forms were completed by the researcher. Logistic regression was performed to identify the potential predictors of depression.

**Results:** The mean score of the depression severity in female depressed patients was moderate  $(24.2 \pm 13.8)$  from the total score of 63. Factors associated with moderate-to-severe level of depression were low caregiver and kinship role commitment, low use of seeking social support coping strategy, low emotional support (P < 0.05), age under or equal to 30 years, income less or equal to 20,000 baht, having none-to-low husband care burden, low use of problem focused coping strategy, high use of avoidance coping strategy, receiving low social support and informational support (P < 0.01). The logistic regression analysis indicated that the risks for moderate to severe level of depression were age under or equal 30 years, low income, low husband care burden, low caregiver and kinship role commitment, low problem focused and seeking social support coping strategies, high avoidance coping strategy, and low social support.

*Conclusion:* Depression in most female patients were in the severe level. Promoting multiple role commitment, using the suitable coping strategies, and increasing social support may help reduce female patients' depressive symptoms.

Keywords: Coping strategies, depressive disorder, role commitment, social support.

Depression is more common in women than men, double in prevalence of depressive disorder when compared to men.<sup>(1)</sup> In certain developing countries, gender factors played roles in risks for mental disorders in women. Many women bear the adversities caused by poverty, such as less access to education,

\*Correspondence to: Peeraphon Lueboonthavatchai, Department of Psychiatry, Faculty of Medicine, Chulalongkorn University. Bangkok 10330, Thailand. E-mail: peeraphon\_tu@yahoo.com Received: May 1, 2022 Revised: June 22, 2022 Accepted: July 3, 2022 domestic violence, arranged marriages, limited job opportunities, and limitation of outdoor activity participations.<sup>(2)</sup> Depressed female patients suffered greatly in various aspects of their lives - personal, family, and social. Most patients experienced weight loss, insomnia, and lower attention span. They not only suffered from feeling depressed, but also vulnerability, weariness and hopelessness, thus lead to possible self-harm and suicide.<sup>(1)</sup> The causes of depression vary from different genetic backgrounds to social factors. Many studies found that interpersonal problems, one of the social factors, had strong impact on depression.<sup>(3)</sup>The report showed that role

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transitions were the most common interpersonal problem found in Thai depressed patients.<sup>(4)</sup>

Despite facing interpersonal challenges, depressed patients inevitably possessed varied family and social roles especially women who tend to commit more actively to multiple roles - family and work in their lives.<sup>(5)</sup> Previous studies showed that having multiple role commitment led to role strain and conflict<sup>(6)</sup>, while other studies argued that multiple role commitment in fact provided psychological benefits. Women with multiple roles had more opportunities to enhance their interpersonal and task-related skills, improve their self-esteem, and get access to more social support.<sup>(7)</sup> Therefore, depressed patients having relationship problems and interpersonal functions were found to be a great factor associated with having less multiple role commitment, leading to limited social support in women.<sup>(8)</sup>

A qualitative research in Thailand showed that Thai women in an area in North-eastern Thailand mostly suffered from serious family problems which were the main factors relating to preoccupied thoughts and depression. Despite different coping strategies to choose from, these women found their situations too difficult to handle, resulted in surrendering to their problems and stress, and avoiding to solve them.<sup>(9)</sup> Normally, people use different coping strategies to confront with their problems and stress. A study reported that coping strategies could be divided into three main types, namely: problem focused coping, seeking social support, and avoidance. Women themselves choose their coping strategies differently according to factors such as problem solving skills, choices available in life, and social support.<sup>(10)</sup>

Although interpersonal problem and stressful life events were known as the precipitating factors of depressive disorder, the studies of women's role commitment and coping strategies associated with depression were limited in Thailand. The present study aimed to determine the severity and associated factors of depression in female patients with depressive disorders. It will help understand, support, and prevent depression in Thai women.

#### Materials and methods

Using Cochran's formula, 152 female outpatients, above 18 years old, were recruited from the Department of Psychiatry, King Chulalongkorn Memorial Hospital, Bangkok during September -December 2021. The inclusion criteria were female patients diagnosed with major depressive disorder (MDD) or persistent depressive disorder (dysthymia) based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) by psychiatrists or psychiatric residents. The exclusion criteria were those with other psychotic disorders, schizophrenia, bipolar disorders and mental retardation. The data in this research were collected from two sources: self-questionnaires and medical record. All subjects provided their written informed consent and completed a demographic data form along with five questionnaires including Demographic Questionnaire, Beck Depression Inventory-II (BDI-II-Thai version), Multiple Role Commitment Questionnaire, Coping Scale and Social Support Questionnaire. All subjects' medical data forms including depression diagnosis, duration of illness, medications, and treatment records were completed by the researcher. The study has been approved by the Ethics Committee, the Institutional Review Board of Faculty of Medicine, Chulalongkorn University (IRB no. 420/64).

The demographic data form consisted of data about socio-demography, multiple roles and their levels of burden, physical illnesses and substance use. The severity of depression was assessed by Beck Depression Inventory-II (BDI-II) translated to BDI-II-Thai version by Thavichachart N, *et al.*<sup>(11)</sup> It has good validity and reliability and is widely used for depression evaluation in Thai depressed patients (Cronbach's alpha coefficient = 0.91). It is composed of 21 items with the scores ranged from 0 - 63. The scores of 0 - 13 indicate minimal depression; scores of 14 - 19 indicate mild depression; and scores of 26 - 63 indicate severe depression.

The Multiple Role Commitment Questionnaire, developed and adapted from Orathai P. <sup>(12)</sup> was used to identify levels of role commitment in a person's life. The questionnaire displayed good validity and reliability in Thai socio-cultural context (Cronbach's alpha coefficient = 0.72). It is composed of 31-item questionnaire of role commitment in seven psychosocial domains: 1) marriage: how committed a woman is to a wife's role; 2) parenting: how committed a woman is to a mother's role; 3) occupation: how committed a woman is to her career and workload; 4) caregiving: how committed a woman is to a daughter's role in taking care of her parents; 5) kinship: how committed a woman is to provide help to her relatives; 6) friendship: how committed a woman is to being a friend; and, 7) community: how committed a woman is to the role in her neighbourhood or society. The assessment and scoring were based on participants' perceived role commitment regardless of their actual life roles in reality, expressed through a five-point Likert scale ranging from 1 (extremely low) to 5 (extremely high). The scores were summed and divided by the numbers of each domain to identify the most committed role in the patient's life.

Coping strategies were measured by the Coping Scale, developed from the stress coping theory of Lazarus, adapted by Leksomboon P.<sup>(13)</sup> It showed good validity and reliability (Cronbach's alpha coefficient = 0.82). The coping scale consisted of 39 items of three coping strategies: problem focused coping, seeking social support and avoidance. The scores in each coping strategy ranging from 1 (not at all) to 5 (extremely) were summed and divided by the numbers of each coping strategy to identify the most coping strategy used.

The Social Support Questionnaire, developed by Lueboonthavatchai P.<sup>(14)</sup> was used to assess the amount of social support a person received. Displaying good validity and reliability, the questionnaire consisted of 16 items of social support in three domains: emotional support, news and information and physical support. The sums of score in each social support area and in total were categorized into three levels of amount received (low, moderate and high) by mean and standard deviation.

The severity of depression in female patients was presented in proportion and percentage. The associated factors of depressive disorder were identified using Chi-square test and Fisher's Exact test. The association strength was presented using odds ratio (OR) with 95% confidence interval (CI). The factors with P - value < 0.05 were entered into the logistic regression to identify potential predictors of depressive disorder in female patients. A P - value < 0.05 was considered statistically significant. All statistical analyses were performed with SPSS version 28.0 for Macintosh.

#### Results

There were 152 female subjects in this study aged from 19 - 72 years (mean age = 35.9, standard deviation = 12.5); 92 subjects were single (60.5%). Most of them had Bachelor's Degree education or above (124 subjects, 67.1%); 98 subjects (64.5%) were employed and 58 subjects (38.2%) had profession work type; 88 subjects (57.9%) had an income of 20,000 baht per month or above and most of them had financial adequacy (118 subjects, 77.6%). Current life burden of all subjects were measured regardless of their willingness to commit to each role. In all, 107 subjects (83.5%) had none or minimal husband care burden, housework burden (85 subjects, 55.9%), child care burden (113 subjects, 73.3%), caregiver burden (106 subjects, 69.7%) and kinship burden (136 subjects, 89.5%); 102 subjects (67.1%) had moderate or heavy financial burden, and 86 subjects (56.6%) had moderate or heavy workload burden; 90 subjects (59.2%) had physical illness such as allergy or high blood pressure; 135 subjects (88.8%) did not have other mental illnesses such as panic disorder or PTSD; 77 subjects (50.6%) had less than two years under treatment plan of depressive disorder. Most subjects did not smoke, use alcohol or other drugs (Table 1).

Demographic character	istics (n = 152)	Ν	Percentage
Age (years)	19-30	65	42.8
	31-40	43	28.3
	41-50	21	13.8
	51-60	19	12.5
	61 and over	4	2.6
Marital status	Single	92	60.5
	Married/widowed/divorced	60	91.2
Children	Without children	104	68.4
	With children	48	31.6
Education	Lower than Bachelor's Degree	28	18.4
	Bachelor's Degree and higher	124	81.6
Occupation	Unemployed	54	35.5
-	Employed	98	64.5

 Table 1. Demographic characteristics of female depressed subjects.

Demographic characteristics (1	n = 152)	Ν	Percentage
Work type	Profession	58	38.2
	Manager/worker	40	26.3
Income (Baht /month)	≤20,000	88	57.9
	More than 20,000	64	42.1
Financial adequacy	Enough	118	77.6
	Not enough	34	22.4
Husband care burden	None-minimal	127	83.5
	Moderate-heavy	58 40 88 64 118 34	16.5
Housework burden	None-minimal	$\begin{array}{c} 58\\ 40\\ 88\\ 64\\ 118\\ 34\\ 127\\ 25\\ 85\\ 67\\ 113\\ 39\\ 50\\ 102\\ 66\\ 86\\ 106\\ 46\\ 136\\ 106\\ 46\\ 136\\ 106\\ 46\\ 136\\ 106\\ 46\\ 135\\ 17\\ 77\\ 75\\ 125\\ 27\\ 135\\ 17\\ 151\end{array}$	55.9
	Moderate-heavy	67	44.1
Child care burden	None-minimal	113	73.3
	Moderate-heavy	39	25.7
Financial burden	None-minimal	50	32.9
	Moderate-heavy	102	67.1
Workload burden	None-minimal	66	43.4
	Moderate-heavy	86	56.6
Care provider burden	None-minimal	106	69.7
1	Moderate-heavy	46	30.3
Kinship burden	None-minimal	136	89.5
1	Moderate-heavy	16	10.5
Physical illnesses	Absence	62	40.8
5	Presence	90	59.2
Other mental illnesses	Absence	135	88.8
	Presence	17	11.2
Depression duration (years)	≤2	77	50.6
1	More than 2	75	49.3
Smoking	Absence	125	82.2
8	Presence	27	17.8
Alcohol use	Absence	135	88.8
	Presence		11.2
Other drugs use	Absence		99.3
5	Presence		0.7

Table 1. (Cont.) Demographic characteristics of female depressed subjects.

The scores of Beck Depression Inventory II Thai Version, Multiple Role Commitment Questionnaire, Coping Scale and Social Support Questionnaire are shown in Table 2. The scores of BDI-II-Thai Version which indicate the severity of depression ranged from 0 - 63. The mean BDI-II-Thai Version score of the depressed subjects was moderate ( $24.2 \pm 13.8$ ). From the Multiple Role Commitment Questionnaire, the subjects were most committed to the caregiver role  $(3.8 \pm 1.0)$  and least committed to the community role  $(3.0 \pm 1.0)$ . Regarding the coping strategies, the strategy most of them used was problem focused coping strategy  $(3.4 \pm 0.6)$ , followed by avoidance coping strategy  $(3.2 \pm 0.8)$  and seeking social support coping strategy  $(3.2 \pm 1.1)$ . Female depressed subjects received moderate social support ( $55.2 \pm 13.6$ ) where

emotional support was mostly received  $(25.1 \pm 6.7)$ , followed by tangible support (16.5  $\pm$  5.5) and informational support  $(13.6 \pm 4.0)$ .

The relationship between demographic characteristics, role commitment, coping strategies, social support and depression severity was shown in Table 3. The factors associated with depression severity were age of 30 and below (P < 0.01), income of 20,000 baht and lower (P < 0.01), having noneto-minimal husband care burden (P < 0.01), low caregiver role commitment (P < 0.05), low kinship role commitment (P < 0.05), less problem focused coping strategy (P < 0.05), less seeking social support coping strategy (P < 0.05), high avoidance coping strategy (P < 0.01), and low social support (P < 0.01).

 Table 2. Depression and variables associated with depression of the subjects.

Level (scores)	Ν	%	Level (scores)	Ν	%
Beck depression inventory-II			Coping strategies		
Low (0 - 13)	37	24.3	Problem focused coping strategy		
Minimal (14 - 19)	20	13.2	Extremely $low(1 - 1.49)$	0	0.0
Moderate (20 - 28)	37	24.3	Low (1.50 - 2.49)	7	4.6
Severe (29 - 63)	58	38.2	Moderate (2.50 - 3.49)	48	31.0
Role commitment			High (3.50 - 4.49)	82	53.
Marriage role commitment			Extremely high (4.50 - 5.00)	15	9.9
Extremely low (1 - 1.49)	3	2.0	Seeking social support coping strategy		
Low (1.50 - 2.49)	14	9.2	Extremely low (1 - 1.49)	6	3.9
Moderate (2.50 - 3.49)	58	38.2	Low (1.50 - 2.49)	38	25.0
High (3.50-4.49)	51	33.6	Moderate (2.50 - 3.49)	48	31.0
Extremely high (4.50 - 5.00)	26	17.1	High (3.50 - 4.49)	43	28.
Parent role commitment	-		Extremely high (4.50 - 5.00)	17	11.
Extremely low(1 - 1.49)	1	0.7	Avoidance coping strategy		
Low (1.50 - 2.49)	9	5.9	Extremely low (1 - 1.49)	0	0.0
Moderate (2.50 - 3.49)	40	26.3	Low (1.50 - 2.49)	29	29.0
High (3.50 - 4.49)	74	48.7	Moderate (2.50 - 3.49)	55	55.0
Extremely high (4.50 - 5.00)	28	18.4	High (3.50 - 4.49)	66	66.0
Career role commitment	20	10.4	Extremely high (4.50 - 5.00)	2	2.0
Extremely low (1 - 1.49)	0	0.0	Social support	2	2.0
Low (1.50 - 2.49)	2	1.3	Emotional support		
Moderate (2.50 - 3.49)	62	40.8	Low(7.00 - 18.37)	26	17.
High (3.50 - 4.49)	81	53.3	Moderate (18.38 - 31.77)	20 94	61.
Extremely high (4.50 - 5.00)	7	55.5 4.6	High (31.78 - 35.00)	32	21.
Caregiver role commitment	/	4.0	Informational support	32	21.
0	5	3.3	Low (4.00 - 9.58)	23	15.
Extremely low $(1 - 1.49)$	5				
Low(1.50-2.49)	8	5.3 25.7	Moderate (9.59 - 17.67)	102	67.
Moderate (2.50 - 3.49)	39	25.7	High (17.68 - 20.00)	27	17.8
High (3.50-4.49)	56	36.8	Tangible support	27	170
Extremely high (4.50 - 5.00)	44	28.9	Low (5.00 - 10.95)	27	17.8
Kinship role commitment	10		Moderate (10.96 - 21.96)	92 22	60.
Extremely low $(1 - 1.49)$	10	6.6	High (21.97 - 25.00)	33	21.7
Low (1.50 - 2.49)	23	15.1	Overall social support		
Moderate (2.50 - 3.49)	58	38.2	Low(20.00-41.59)	24	15.8
High (3.50 - 4.49)	44	28.9	Moderate (41.60 - 68.72)	102	67.
Extremely high (4.50 - 5.00)	17	11.2	High (68.73 - 80.00)	26	17.
Friendship role commitment					
Extremely $low(1 - 1.49)$	1	0.7			
Low (1.50 - 2.49)	8	7.4			
Moderate (2.50 - 3.49)	41	38.0			
High (3.50 - 4.49)	34	31.5			
Extremely high (4.50 - 5.00)	22	20.4			
Community role commitment					
Extremely $low(1 - 1.49)$	10	6.6			
Low (1.50 - 2.49)	37	24.3			
Moderate (2.50 - 3.49)	65	42.8			
High (3.50 - 4.49)	26	17.1			
Extremely high (4.50 - 5.00)	14	9.2			

 Table 3. Relationship between demographic characteristics, role commitment, coping strategies, social support and depression in female depressed subjects.

Variables associated with depression	Depression				<i>P</i> -value
	Minimal - Mild		Moderate - Severe		
	Ν	%	Ν	%	
Age (years)					
≤30	14	24.6	51	75.4	< 0.001**
Above 30	43	49.4	44	50.6	
Income (baht/month)					
≤20,000	15	23.4	49	76.6	0.002**
More than 20,000	42	47.7	46	52.3	
Husband care burden					
None-minimal	40	31.5	87	68.5	< 0.001**
Moderate-heavy	17	17.0	68.0	8.0	32.0
Caregiver role commitment					
Extremely low-low	1	4.9	12	92.3	0.032 <sup>3</sup> %*
Moderate-extremely high	56	40.3	83	86.9	
Kinship role commitment					
Extremely low-low	7	21.2	26	78.8	0.029*
Moderate-extremely high	50	42.0	69	58.0	
Problem focused coping strategy					
Extremely low-low	0	0.0	7	100	0.046 <sup>3</sup> %*
Moderate-extremely high	57	39.3	88	60.7	
Seeking social support coping strategy					
Extremely low-low	10	22.7	34	77.3	0.016*
Moderate-extremely high	47	43.5	61	56.5	
Avoidance coping strategy					
Extremely low-low	26	89.7	3	10.3	< 0.001*
Moderate-extremely high	31	25.2	92	74.8	
Social support					
Low	3	12.5	21	87.5	0.006*
Moderate-high	51	42.2	74	57.8	
Emotional support					
Low	4	15.4	22	84.6	0.011*
Moderate-high	53	42.1	73	57.9	
Informational support					
Low	3	13.0	20	87.0	0.009*
Moderate-high	54	41.9	75	58.1	

\*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001,  $\Delta =$  Fisher's Exact test

The result of logistic regression presented in Table 4 indicated that female aged lower or equal 30 years, low income, and low husband care burden were the significant demographic factors of depressive disorder. Other significant predictors included low caregiver role commitment, kinship role commitment, low coping strategies in problem focused and seeking social support, high avoidance coping strategy, and low social support.

#### Discussion

Most of the depressed female patients in this study

were young-to-middle-aged women with the average age of 35 years and 9 months. Most were single with none-to-low husband care burden, and found to have severe depression. Low income, low commitment in caregiver and kinship roles were also associated with depression. The changes in Thai family structure could be the impact for this factor. The elders tend to stay with their partners alone more than with their children who left their hometown for work. <sup>(15)</sup> This could be one of the reasons for low commitment in caregiver and kinship roles in female patients. 
 Table 4. Predictors of depressive disorder in the female depressed subjects.

Variables	Coefficient (β)	Adjusted odds ratio (OR)	95% CI of adjusted OR	<i>P</i> -value
Demographic variables				
Age $\leq 30$ years	1.68	5.34	1.87 - 15.25	0.002**
Lowincome	1.83	6.25	2.17 - 17.98	< 0.001**
None-minimal husband care burden	1.98	7.25	1.65 - 31.89	0.009**
Role commitment				
Extremely low-low caregiver role	-2.38	0.09	0.00 - 8.09	0.297
Extremely low-low kinship role	0.24	1.27	0.28 - 5.82	0.757
Coping strategies				
Extremely low-low problem focused	2.19	9.00	2.60-31.16	< 0.001**
Extremely low-low seeking social support	0.10	1.10	0.34-3.56	0.87
Moderate-extremely high avoidance	1.94	6.94	2.94 - 20.85	< 0.001**
Low social support	- 1.79	0.17	0.03 - 0.82	0.027*

\**P*<0.05, \*\**P*<0.01, \*\*\**P*<0.001

Regarding factors associated with depression, this study found that those with the age of 30 and less showed significantly higher score on depression. Previous studies found that as people advanced in age, their maturity, role management and coping skills increased. Adults at middle age and above had better coping mechanism. They were able to manage and cope better with role conflicts to maintain good relationships. <sup>(16)</sup> A study in Thailand showed that younger depressed patients had less social skills than the older patients, resulting in having interpersonal problems and insufficient social support. <sup>(17)</sup>

Individuals with low income were also at higher risk for depression. High family or personal daily expenses and debts could contribute to burden and worries in depressed patients. A study in a hospital in Roi Et reported that depressed patients with insufficient family income were 0.204 times more depressed than those with sufficient family income. <sup>(18)</sup> Another study in the United States also found that low income, insufficient savings, and having rental burden were associated with higher rate of depression. <sup>(19)</sup>

Besides age and income, women who had less or no burden of taking care of their husbands showed association with depression. Because being in a healthy relationship can be a beneficial psychological resource for women. Supportive spouses can provide powerful encouragement to depressed patients. In Thai society, women being married generally means having a husband to support a part of household expenses and well-being of a wife.<sup>(20)</sup> Being married also promotes women's sense of security, increases interpersonal skills in marriage role, and also receive support from their husbands.<sup>(21)</sup> Buckman's study found that patients who were single or divorced were at higher risk of depression compared to those who were married. <sup>(22)</sup> Moreover, in other countries, study also showed that marital status was also associated with depression in patients separated or divorced. <sup>(23)</sup>

Regarding psychosocial factors, this study found that low commitment in caregiver and kinship roles were associated with depression. Being committed to these roles is indeed beneficial to a person's mental health. By providing family support physically and mentally through sickness and health can increase self-capability, sense of mastery and life appreciation. <sup>(7, 24)</sup> This is similar to the retrospective study of Engels M. who found that depressed subjects had less roles during their adulthood compared to those with family and work roles. <sup>(25)</sup> Ruderman M, *et al*, also found that women with multiple roles obtained more life satisfaction, self-esteem, skills in other roles, and social support. <sup>(7)</sup>

Being committed to caregiver and kinship roles can be a great challenge to cope with situations and problems in the elderly, possibly creating negative feelings toward the roles. These roles may involve overwhelming sacrifices, pressure, financial burden and health issues. Generally, in Thai society, women are expected to be responsible for housework and family care. Daughters and daughter-in-laws are taught to gratefully provide physical care for their parents in return. <sup>(26)</sup> A study in Thai caregivers of older persons found that 82.5% of 859 subjects were female. The most stressful caregivers were married daughters. Role overload, caregiver's health and insufficient resources were factors associated with stress in caregiver's role. <sup>(27)</sup> Therefore, depressed patients' mental health could affect the commitment in caregiver and kinship roles. However, by having multiple roles and support in the caregiver's role could encourage depressed patients to participate more in these roles and enrich their experiences in a positive way.

Regarding coping strategies, this study revealed that less in problem focused coping strategy, seeking social support coping strategy and more in avoidance coping strategy were associated with depression in female patients. This factor could be derived from patient's less commitment in multiple life roles. Personality trait and insufficient social support to provide problem solving advices, their coping choices were limited. Avoidance could become their priority when facing difficult challenges. When they were unable to manage the right coping strategy, they may experience strain, failure and hopelessness.<sup>(28)</sup>This is similar to the qualitative study of Pereira B, et al., in depressed Indian women who were married and had minimal roles. The study found that when these women faced difficult problems and stress, only a few of them chose to tell it to their trusted ones. Most of them chose to surrender to their problems, internalized their feelings, slept through those difficult times and smoked or used alcohol to relieve their stress. Moreover, a previous study found that distress was associated with coping strategies used. Problem focused coping strategy was found to be positively correlated with feeling of success. While avoidance coping strategy was negatively correlated with feeling of success and positively correlated with distress.<sup>(13)</sup> Studies also found that seeking social support coping strategy was a protective factor for women's mental health when they were offered with help and not rejected. (29, 30) These studies explained why depressed female patients used these coping strategies.

Social support in all aspects was also significantly associated with depression. This involved not only tangible but also emotional support including being empathized, encouraged and supported from people around, which were the protective factors for depressed patient's recovery. A previous study showed that social support was significantly associated with self-sufficient and self-regaining in female depressed patients. <sup>(31)</sup> Therefore, having less role commitment in female patients could relatively lead to less interpersonal relationship and less social support.

As the above, there were several predictors of depressive disorder in the depressed subjects. The factors included young age, low income, none-tominimal husband care burden, low problem focused and high avoidance coping strategy, and low social support. Depression in teenage patients could exacerbate when entering adulthood, adding more potential for depression to worsen. (32) Association between low income and depression can be complex. Since people in all socioeconomic status can experience depression, but depending on different life factors, low income can be a predictor for depressive disorder. Subjects having no or less burden in taking care of their husbands could be both factor and effect of depression. Patients with interpersonal problems may find it difficult to build and maintain relationship with their partners. Without a husband as a support both physically and mentally to the patient's needs, this part of encouragement to recover from depression is limited. Avoidance coping strategy could also be factor, symptom and effect of depression in female patients. It could be from limited social support, leading to internalization and avoiding the stressful events. Therefore, it is essential to promote multiple role status and commitment in female patients to increase social skills, self esteem, suitable coping strategy and social support which would help to reduce the symptoms of depression.

However, there were limitations of this research that should be aware of this study was conducted in the outpatient department where most subjects were young-to-middle-aged women. The characters of depressed subjects may affect the role commitment and coping strategies used according to their experiences. Therefore, the findings should be interpreted in the context of young-to-middle-aged depressed female patients in the clinical setting.

#### Conclusion

The present study showed the severity of depression in the severe level. The factors associated with depression included young age, low income, less husband care burden, low commitment in care provider and kinship roles, low problem focused and seeking social support coping strategies, high avoidance coping strategy and low social support. Helping the persons to connect themselves in multiple roles through interpersonal psychotherapy (IPT) and psychoeducation for them and their family members will help strengthen their role commitment and broaden their source of social support. Supporting depressed patients in choosing the suitable coping strategies will also promote their self-esteem and reduce the symptoms of depression.

#### Conflict of interest statement

Each of the authors has completed an ICMJE disclosure form. None of the authors declare any potential or actual relationship, activity, or interest related to the content of this article.

#### Data sharing statement

The present review is based on the reference cited. Further details, opinions, and interpretation are available from the corresponding authors on reasonable request.

#### References

- 1. Lueboonthavatchai O, Lueboonthavatchai P. Psychosocial treatment for depressive disorder. 1st ed. Bangkok: Tana Press Co., Ltd; 2010.
- Patel V, Kleinman A. Poverty and common mental disorders in developing countries. Bull World Health Organ 2003;81:609-15.
- Weissman MM, Markowitz JC, Klerman GL. Comprehensive guide to interpersonal psychotherapy. New York: Basic Books. 2000;81:609–15.
- Lueboonthavatchai P, Thavichachart N, Lertmaharit S. Relationship between interpersonal problem areas and depressive disorder in Thai depressed patients: a matched case-control study. J Psychiatr Assoc Thailand 2008;51:69-80.
- National Statistical Office of Thailand. Women and their work roles. [Cited 2021, December 22] [Available from: www.nso.go.th/sites/2014/Pages/ActivityNSO/ A28-04-60-1.aspx.
- 6. Leonard I. Pearlin. Psychosocial Stress: Trends in theory and research: Academic Press; 1983.
- Ruderman MN, Ohlott PJ, Panzer K, King SN. Benefits of multiple roles for managerial women. Academy Manag J 2002;45:369-86.
- Kang J, Jang S. Effects of women's work-family multiple role and role combination on depressive symptoms in Korea. Int J Environ Res Publ Health 2020;17:12-49.
- 9. Rungreangkulkij S, Chirawatkul S, Kongsuk T,

Sukavaha S, Leejongpermpoon J, Sutatho Y. Sex or gender leading to a high risk of depressive disorder in women. J Psychiatr Assoc Thailand 2012;57:61-74.

- Mingmaung W. The effect of group reality therapy on coping strategies of low academic achievement mathayom suksa three students: Chulalongkorn University; 1997.
- 11. Thavichachart N, Tangwongchai S, Worakul P, Kanchanatawan B, Suppapitiporn S, Na Pattalung AS, et al. Posttraumatic mental health establishment of the Tsunami survivors in Thailand. Clin Pract Epidemiol Ment Health 2009;5:11.
- Orathai P. Relationships between multiple roles, psychological well-being, skills and performance of government university administrators: an application of multi-sample, non-recursive structural equation model. J Res Methodol 2006;19:291-314.
- 13. Leksomboon P. Job stress, coping, and burnout among helping practitioners in public welfare centers: a mixed methods research: Chulalongkorn University; 2011.
- 14. Lueboonthavatchai P. Prevalence and psychosocial factors of anxiety and depression in breast cancer patients. J Med Assoc Thai 2007;90:2164-74.
- Knodel J, Chayovan N. Population ageing and the well-being of older persons in Thailand: Past trends, current situation and future challenges. Bangkok: UNFPA Thailand and Asia and the Pacific Regional Office; 2008.
- Luong G, Charles ST, Fingerman KL. Better with age: Social relationships across adulthood. J Soc Pers Relat 2011;28:9-23.
- Kurimoto P. Prevalence and associated factors of social skills deficits in patients with depressive disorders at Psychiatric Outpatient Department, King Chulalongkorn Memorial Hospital. Chula Med J 2021;65:431-40.
- Purmtummasin A. The factors influencing to level depression of depressive disorder in Roi-et Hospital. Mahasarakham Hospital J 2016:87-96.
- Ettman CK, Cohen GH, Vivier PM, Galea S. Savings, home ownership, and depression in low-income US adults. Social Psychiatry Psychiatr Epidemiol 2021; 56:1211-9.
- 20. Wongvisetsirikul P, Luecha Y, Gerdprasert S. Relationships among demographic factors, spouse support, transition to motherhood and postpartum depression. Rama Nurs J 2000:201-12.
- 21. Graves LM, Ohlott PJ, Ruderman MN. Commitment to family roles: Effects on managers' attitudes and performance. J Appl Psychol 2007;92:44-56.

- 22. Buckman J. Role of age, gender and marital status in prognosis for adults with depression: An individual patient data meta-analysis. Epidemiol Psychiatr Sci 2021;30:42.
- Hwu HG, Chang IH, Yeh EK, Chang CJ, Yeh LL. Major depressive disorder in Taiwan defined by the Chinese diagnostic interview schedule. J Nerv Mental Dis 1966; 184:497-502.
- 24. Phuphaibul R. Family nursing: theoretical perspectives and application. Bangkok: VJ Printing; 1998.
- 25. Engels M, Wahrendorf M, Dragano N, McMunn A, Deindl C. Multiple social roles in early adulthood and later mental health in different labour market contexts. Adv Life Course Res 2021;50:100-432.
- 26. Kaewraya K. Relationships between personal factors, ability of elderly to perform daily living activities, elderly and elderly caregiver relationships and role stress of caregiver of the elderly in Petchaburi Municipality, Petchaburi Province. A Thesis for the Degree of Master of Nursing Science: Chulalongkorn University; 1997.
- 27. Gray R, Thapsuwan S. Factors affecting on stress of caregivers to older persons. J Social Sci Human Res Asia 2014;20:203-28.

- Cary L. Cooper James Campbell Quick. The handbook of stress and health: A guide to research and practice: Cary L. West Sussex: Cooper James Campbell Quick; 2017.
- 29. Maureen Seguin & Bayard Roberts. Coping strategies among conflict-affected adults in low- and middleincome countries: A systematic literature review. Global Public Health 2017;12:811-29.
- Scholte WF, Olff M, Ventevogel P, de Vries GJ, Jansveld E, Cardozo BL, et al. Mental health symptoms following war and repression in eastern Afghanistan. J Am Med Assoc 2004;292:585-93.
- Chanapan N, Seeherunwong A, Yuttatri P, Kongsakon R. Relationship between the factors of social support and self-insight and self-regaining amongst female depression patients. Thai J Nurs Council 2013;28: 44-57.
- 32. Avenevoli S, Knight E, Kessler RC, Merikangas KR. Epidemiology of depression in children and adolescents. In. Abela JRZ, Hankin BL (Eds.), Handbook of depression in children and adolescents. New York: Guilford; 2008. p. 6-32.